



Broadband2Go

WINDOWS® USER GUIDE



Please save this User Guide to your computer's hard drive for future reference.

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Table of Contents

Welcome.....	3
Broadband2Go Features.....	4
Package Contents.....	6
Your Virgin Mobile USA MC760 Modem.....	7
Accessories	8
Care of Your Modem	10
USB Modem Basics.....	11
Daily Use.....	11
LED States.....	12
Properly Insert the Modem.....	12
Properly Remove the Device	13
Using the microSDHC Memory Card	14
Inserting and Removing a microSDHC Card.....	14
Working with Files on the microSDHC Card	16
Set Up & Connect.....	19
Software Overview	20
Using the Broadband2Go software.....	21
Connecting to the Network.....	21
Using the Connection Manager.....	23
Using the system tray icon	25
The Broadband2Go menus	26
Settings	27
Languages	33
Program Modem.....	33
Device Properties.....	34
Radio Enable/Disable.....	34
About	35

Troubleshooting.....	37
Troubleshooting.....	38
Uninstall and reinstall the software	41
Reference	43
Safety and Liability	44
Product Specifications.....	47
System Requirements.....	47
Technical Specifications	47
Regulatory	49
Limited Warranty and Liability.....	56

Congratulations on purchasing a broadband modem by Novatel Wireless

This Modem operates over high-speed networks enabling you to connect at high speeds to the Internet or your corporate Intranet, and access your email while you are away from the office.

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5,267,261	5,544,196	5,267,262
5,568,483	5,337,338	
5,600,754	5,414,796	5,657,420
5,416,797	5,659,569	
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About this Guide

Thank you for choosing Virgin Mobile and welcome to the MC760 Modem and Broadband2Go User Guide. The Broadband2Go software works with your Broadband2Go device to enable you to access the Internet from wherever you want. Work, shop, play, chat, and more – all on the go. This device can also be used as a USB mass storage device that allows you to read and write data onto a microSDHC card.

This User Guide outlines the features and use of the device and Broadband2Go.

- 1 Welcome** – This chapter provides information about the modem, daily use information, and about using the microSDHC card capabilities.
- 2 Configure and Connect** – This chapter provides instructions for managing and configuring your Internet connection and using the features of Broadband2Go.
- 3 Troubleshooting** – This chapter provides troubleshooting information for your Broadband2Go. In addition, instructions for uninstalling the software are contained here.
- 4 Reference** – This chapter contains a safety and regulatory information, product specifications, a glossary and the warranty statement.

1

Welcome

Broadband2Go Features
Package Contents
Your Virgin Mobile USA MC760 Modem
Care of your Modem
USB Modem Basics
Using the microSDHC Memory Card

Broadband2Go Features

Thank you for choosing the advanced and compact MC760 Modem with microSDHC™ memory support by Novatel Wireless! This 2-in-1 mini device empowers you with high-speed data access on the Virgin Mobile USA Broadband2Go wireless data network, and it provides removable memory storage options in one convenient and compact USB package. Along with the many advanced features of Broadband2Go, such as data speeds up to 1.4Mbps, this device offers:

- **High Speed Wireless Data (Broadband2Go)**

The Broadband2Go device gives you access to the latest in CDMA EV-DO technology, referred to as Rev A, resulting in higher data rates and higher system capacity that enable richer applications and services.

- **Optional microSDHC Memory Storage**

Optional removable memory storage makes life on the go more convenient than ever. Save and transport important files such as documents, music, and pictures on microSDHC cards.

- **Thumb-Size USB (Universal Serial Bus)**

Only a couple of inches in size, the universal form factor makes wireless Broadband2Go and file storage more convenient than ever.

- **NovaSpeed® Technology**

NovaSpeed, a patent-pending software from Novatel Wireless, enhances simultaneous upload and download performance significantly. With NovaSpeed built into the device, streaming video, online gaming, large file transfers and other online activities experience minimal interruptions or buffering.

- **Intuitive Broadband2Go Software**

Built-in for automatic installation without a CD and easy navigation on Windows Vista and XP (SP2 or higher).

- **Additional features include:**

- Advanced embedded antenna design
- VPN capability
- Auto connectivity options
- NDIS configuration
- External antenna connector

Package Contents

The Virgin Mobile USA Broadband2Go package includes:

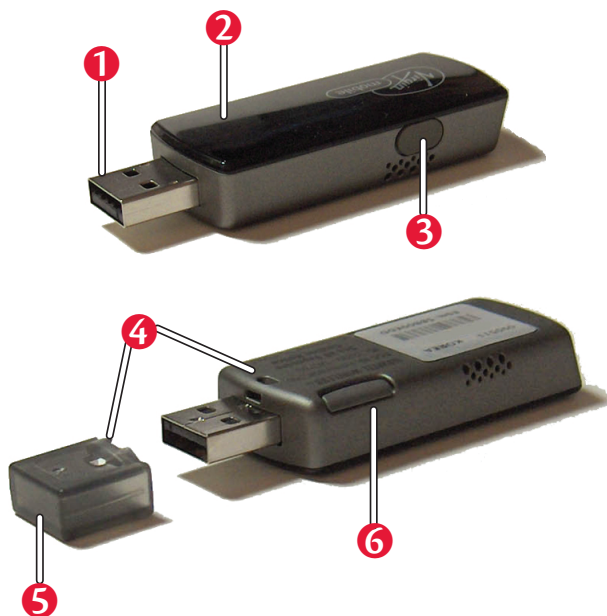
- Virgin Mobile USA MC760 Broadband2Go device
- Broadband2Go software (on device)
- Broadband2Go Quick Start Guide
- Broadband2Go Product User Guide (on device)
- Lanyard

In addition, you can purchase these optional accessories for use with the modem:

- External Antenna – Provides improved performance in fringe areas.
- microSDHC card – up to 16 GB. Used for file transfer and sharing.

Your Virgin Mobile USA MC760 Modem

Your device has the following parts:



1. USB Connector	Attaches to the computer USB port.
2. LED Indicator	Provides status information.
3. External Antenna Connector	For optional external antenna
4. Accessory Hook	Permits use of lanyard or key chain accessories for portability of your device.
5. Protective Cap	Protects USB Connector from debris and damage when not in use.
6. microSDHC memory card slot	Accommodates optional microSDHC cards up to 16GB.

Accessories

Lanyard

A lanyard is included in the MC760 Modem package. This accessory provides convenient portability while on the go.

IMPORTANT: Do not wear the lanyard and the MC760 Modem around rotating machinery or during sleep.

To attach the lanyard to the MC760 Modem

1. Locate the accessory hook on the device and the protective cap.



2. Pinch the looped thread on the lanyard or key chain and feed through the accessory hook in the protective cap.
3. Pinch the looped thread on the lanyard or key chain and insert into the accessory hook hole on the device until it exits through the other side.
4. Insert the end of the Lanyard and the protective cap through the loop and pull to tighten.

Optional External Antenna

The modem can use an optional external antenna (purchased separately) to increase performance in fringe reception areas.

To access the External Antenna Connector:

1. Locate the External Antenna Connector on the side of the device.
2. Remove the rubber protector to expose the External Antenna Connector. (Keep the rubber protector in a safe place for future use in order to protect the External Antenna Connector from debris when not in use).

Care of Your Modem

As with any electronic device, the MC760 Broadband2Go device must be handled with care to ensure reliable operation. Follow these guidelines:

- Do not apply adhesive labels to your device; they may cause it to potentially overheat and could alter the performance of the antenna.
- The USB connector should plug easily into your computer's Type A USB port. Forcing the device into a port may damage the connector.
- Protect your device from liquids, dust and excessive heat.
- Do not leave the device in a closed car.
- Store your device in a safe place when not in use.
- Operating Temperature: 0°C to 45°C (32°F to 113°F)
- Storage Temperature: -20°C to 65°C (-4°F to 149°F)

USB Modem Basics

Daily Use




After you have set up and configured your modem and installed the Broadband2Go software, daily use is simple and easy.

When you connect the device, the following should occur:

- The label of the device should be facing up when it is connected to most computers.
- The device has power as soon as you connect it to the USB port of your computer. Although the device has power, it does not automatically connect to the Internet.
- The LED indicator on the device lights up.
- If sound effects are enabled, the computer may beep.
- The Broadband2Go software starts (unless the auto-launch feature has been disabled).
- Use the software to connect to the network.

LED States

The MC760 Broadband2Go is designed with an LED status light that indicates if the device has power and gives the current connection status.

No Light	No Power	-	Device off	
	Green	Modem	Solid	Modem has power but is not transmitting or receiving
			Slow Blinking	Searching for CDMA network
			Intermittent Blinking	Connected. Blinking rate relates to data speed.
	Red	Service	Solid	No Service
	Amber	Error	Solid	Error, reset modem

Properly Insert the Modem

1. Remove the protective cap from the device.
2. Grip the device by its sides and gently insert it into the USB port. The device should fit easily into the USB port.

Important: Do not force the device into the USB port as this may damage both the device and the USB port.

If you have difficulty:

- Turn the device over and try again.
 - Verify that you are using a USB port.
-

3. The hardware icon appears in the Windows notification area (system tray).

Properly Remove the Device

Before removing the modem, disconnect from the network and exit the Broadband2Go software. Or you can wait until the computer has shut down and remove the modem then.

IMPORTANT: Verify that all file transfers to the microSDHC card are complete before removing the device, otherwise you are at risk of losing data.

The device's USB technology allows you to safely remove it at any time when you are not connected to the network. These are the recommended ways to remove the device.

Quick Removal

1. End your Broadband2Go session by selecting **Disconnect** from the Broadband2Go software.
2. Simply grip the device on both sides and pull straight out to avoid damaging the USB connectors.

Standard Unplug/Eject Hardware Removal

1. End your Broadband2Go session by selecting **Disconnect** from the Broadband2Go software.
2. Exit the Broadband2Go software to ensure that the device is powered off.

NOTE:

Avoid removing the device before your Internet connection is terminated, as the operating system may occasionally have issues such as freezing or automatic shutdowns.

3. Right-click the Safely Remove Hardware icon in the notification area, click **Safely Remove Hardware**, select the device, and then click **Stop**.
4. Simply grip the device on both sides and pull straight out to avoid damaging the USB connectors.

Using the microSDHC Memory Card

The device is equipped with removable, hot-swappable memory storage using a microSDHC card (sold separately). This feature allows you to use your modem for connectivity and simultaneously as an external flash drive.

Inserting and Removing a microSDHC Card

To insert the microSDHC card:

1. Locate the microSDHC port as depicted in the figure below.



2. The modem is shipped with a plastic “blank” in the microSDHC slot. Remove microSDHC card blank by gently pushing it in slightly and letting go.
3. Line up the microSDHC card with the port, with the gold contact points facing up.
4. Gently push in the microSDHC card until it clicks into place.

NOTE:

Do not force the microSDHC card into the microSDHC slot.

To remove the microSDHC card:

The device's removable memory storage feature is hot-swappable, meaning the microSDHC card may be removed at any time, whether the device is inserted in the computer.

1. Gently push in the microSDHC card slightly and let go.
It will pop halfway out of the slot.
2. Once partially visible, you may pull the microSDHC card out of the slot and store in a dry, safe place.

IMPORTANT: Verify that all file transfers to the microSDHC card are complete before removing it. Interrupting the file transfer may damage your data.

Working with Files on the microSDHC Card

Work with files on the microSDHC card using the same principles that you use to work with files on any disk in your operating system.

The microSDHC card will appear in Windows with a drive letter under Mass Storage or Removable Storage.

Insert the device:

► Make sure the microSDHC card is inserted in the modem, then insert the modem into your computer's USB port. (See ["Inserting and Removing a microSDHC Card" on page 14.](#))

- The computer detects new hardware and the Unplug/Eject icon appears in the taskbar.
- You may save files to the device or move existing files to the device.

Save downloaded files directly to the microSDHC card:

1. In the **Save As** window, browse to My Computer.
2. Select the device, which will have a drive letter and be listed under Mass Storage or Removable Storage.
3. Type a name for the file you are saving to the device and click **Save**.

Save files directly from an application:

1. When saving files directly from an application to the device, go to **File > Save As**.
2. In the Save As window, browse to and select the device, which will have a drive letter and be listed under Mass Storage or Removable Storage.

NOTE:

This window varies with the version of the operating system.

3. Type a name for the file you are saving to the device and click **Save**.

Move existing files from the hard drive:

1. Go to My Computer and locate the device, which will have a drive letter and be listed under Mass Storage or Removable Storage.
2. Double-click to open the device folder and view the contents.
3. You may drag or copy and paste files into the device folder.

Opening Files from the microSDHC Card

1. Ensure the device is properly inserted in the computer (See [“Inserting and Removing a microSDHC Card” on page 14](#)).
2. Go to My Computer and locate the device, which will have a drive letter and be listed under Mass Storage or Removable Storage.
3. Double-click to open the device folder and view the contents.
4. Double-click the filename you want to open.

2

Set Up & Connect

Software Overview
Using the Broadband2Go Software
The Broadband2Go menus

Software Overview

When you attach your device the first time, the Broadband2Go software will install automatically. Follow the on-screen instructions to complete the installation, activate your service, and configure your device.

NOTE:

The Broadband2Go software must be installed on each computer it is used with.

The Broadband2Go shortcut is placed on the desktop and an icon appears in the Windows notification area (also called the system tray).



The notification area icon provides status, menu, and settings access while the desktop shortcut icon launches the Broadband2Go software. You also can configure the Broadband2Go software to automatically start when you insert the device.

Using the Broadband2Go software

If the icon is present in the notification area, the Broadband2Go software is running.

- ▶ Double-click the Broadband2Go desktop shortcut to launch the software, if the icon is missing.

If you would like the software to run whenever Windows is started, make sure that Auto-Launch is checked. See [“Settings” on page 27](#).

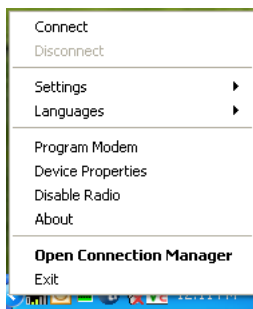
You can manage your network connection and configure your product from either the Connection Manager or the notification area (system tray) icon.

Connecting to the Network

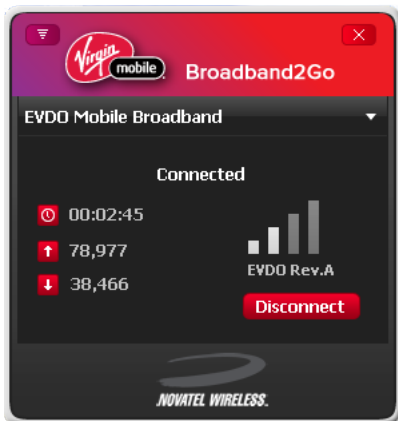
You can connect to the network from either the Connection Manager or the system tray icon.

From the Connection Manager:

1. Right-click the system tray icon and select **Open Connection Manager**.



2. Click the **Connect** or **Disconnect** button.

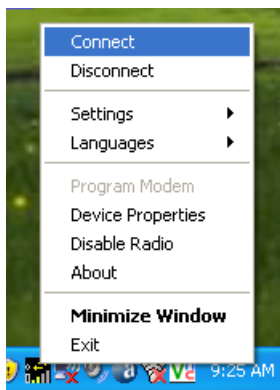


NOTE:

If the status reads **No Device Detected**, be sure that your device is properly connected to your computer.

From the system tray:

1. Right-click the Broadband2Go system tray icon to see the menu.



2. Select **Connect** or **Disconnect** from the menu.

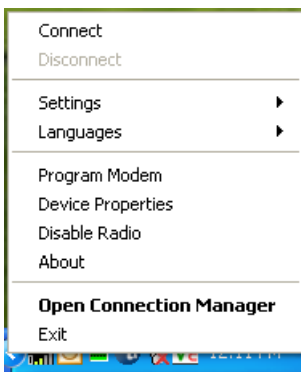
Using the Connection Manager

You can manage your connectivity, assess system status, and access the menus from the Connection Manager.

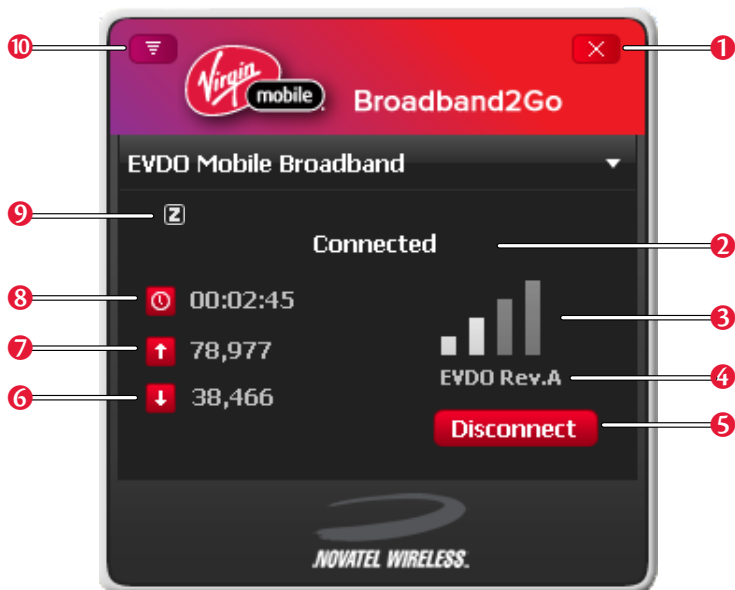
- Right-click the system tray icon and select **Open Connection Manager** to open the Connection Manager.

Tip:

If the icon is not in the system tray, double-click the desktop shortcut or go to **Start → Programs (or All Programs) → Novatel Wireless → VirginMobile → Broadband2Go → Broadband2Go** to start the software.



The Connection Manager window will open.



1. Close button

Click to close the Connection Manager.

Broadband2Go continues to run in the background shown by the icon in the system tray.

2. Connection Status

Displays your connection status: Connected, Disconnected, Ready, and No Device Detected.

3. Signal Strength

More bars indicate a stronger connection.

4. Network Technology

The type of network that you are on: EVDO or Edge.

5. Connect / Disconnect button

Click this button to connect or disconnect from the network.

If the button reads "Activate", the activation wizard will launch to activate your new device.

6. Bytes In

The number of bytes sent and received in this session.

7. Bytes Out

8. Duration

How long the network has been connected.

9. "Sleep mode"

The device is in an inactive state.

10. Menu button

Click to access the Broadband2Go menus.

Using the system tray icon

You can manage your connectivity, assess system status, and access the menus all from the icon located in the Windows notification area or system tray. The system tray is the area in the lower right part of your screen where the clock is located.

The Broadband2Go icon appears in the system tray when the software is running.



Tip:

If the icon is not in the system tray, double-click the desktop shortcut or go to Start → Programs (or All Programs) → Novatel Wireless → VirginMobile → Broadband2Go → Broadband2Go to start the software.

You can view the status of the network connection simply by glancing at the icon.



No device is attached to the computer.

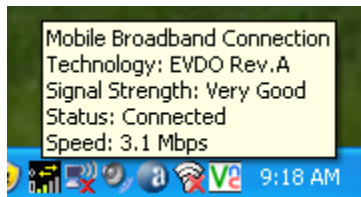


A device is attached and ready to be connected.



The network connection is active.

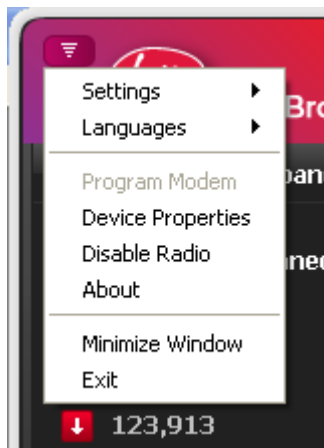
Hover the cursor over the Broadband2Go system tray icon to have a status bubble pop up.



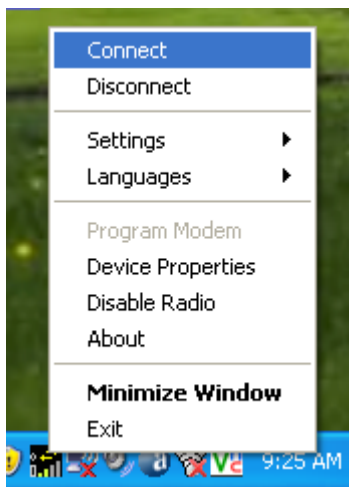
The Broadband2Go menus

You can access the Broadband2Go menus in two ways.

Click the Menu button on the Connection Manager window.



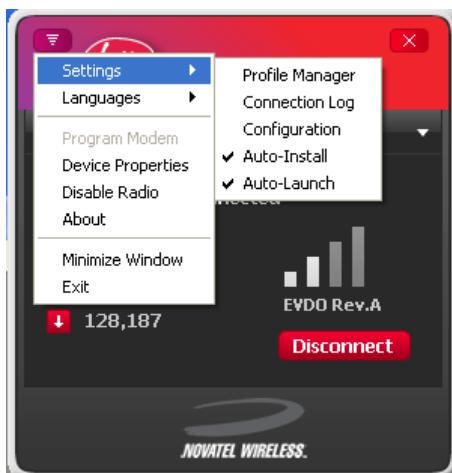
Right-click the Broadband2Go system tray icon.



Settings

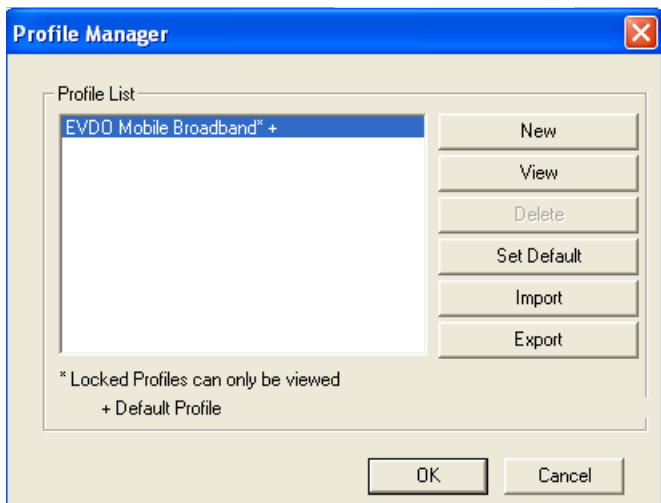
The Settings submenu allows you to configure Broadband2Go to meet your needs. From this menu you can do the following:

- Create additional profiles, including VPNs (virtual private networks)
- View your connection history
- Set up and manage a PIN code for security
- Set the software to auto-launch whenever Windows is started



Profile Manager

The Profile Manager wizard allows you to change your network profile settings. Here you may create new profiles or update existing profiles. For example, you can create a new profile for a VPN or update an existing profile with a new username or password.



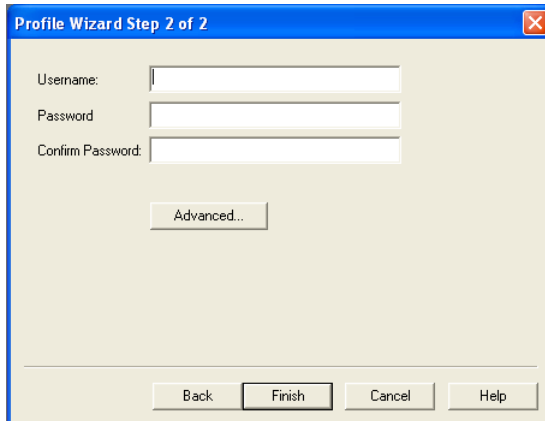
To add a new profile:

1. Click **New** to start the Profile Manager wizard.
2. Enter a simple name for the new profile (for example, My Connection) and click **Next**.



The screenshot shows a window titled "Profile Wizard Step 1 of 2". It contains a text field for "Profile Name" with the value "My Connection". Below it is a message: "Please enter a name that you want to give to this profile. This can be any name of your choosing." There is also a "Connection Type" dropdown menu currently set to "Packet Data Mode". At the bottom are three buttons: "Back", "Next" (which is highlighted with a dashed border), and "Cancel".

3. If your profile is for a VPN or requires manual TCP/IP settings, click **Advanced** and enter the appropriate settings.



The screenshot shows a window titled "Profile Wizard Step 2 of 2". It contains three text fields for "Username:", "Password", and "Confirm Password:". Below these fields is an "Advanced..." button. At the bottom are four buttons: "Back", "Finish" (which is highlighted with a dashed border), "Cancel", and "Help".

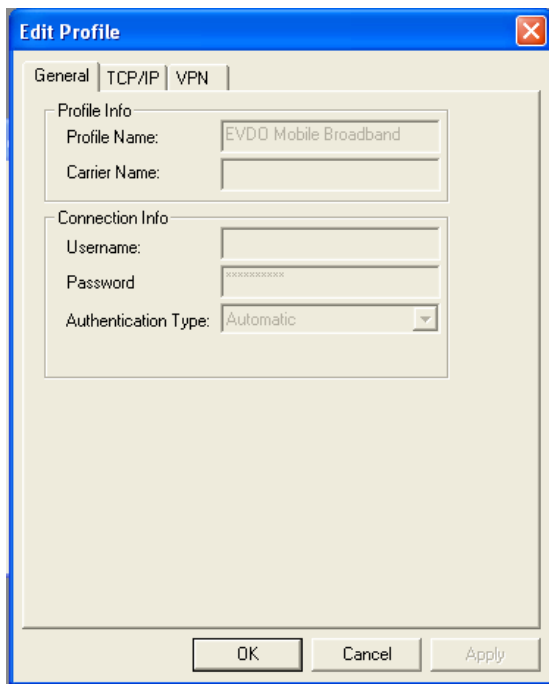
4. Enter a user name and password for this profile and click **Finish**.

To edit or update a Profile:

1. From the Profile Manager main menu, select the profile you want to update and double-click the profile name. An “Edit Profile” window will appear.

Tip:

The default profile cannot be edited.



Edit Profile

General | TCP/IP | VPN

Profile Info

Profile Name: EVDO Mobile Broadband

Carrier Name:

Connection Info

Username:

Password: XXXXXXXXXXXX

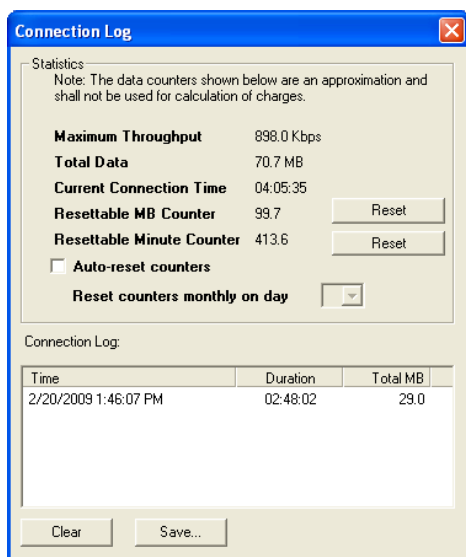
Authentication Type: Automatic

OK Cancel Apply

2. Enter the appropriate information, click **Apply** and then **OK**.

Connection Log

The connection log gives you statistical information about your network connection.



Connection Log [X]

Statistics

Note: The data counters shown below are an approximation and shall not be used for calculation of charges.

Maximum Throughput	898.0 Kbps
Total Data	70.7 MB
Current Connection Time	04:05:35
Resettable MB Counter	99.7 <input type="button" value="Reset"/>
Resettable Minute Counter	413.6 <input type="button" value="Reset"/>

☐ Auto-reset counters

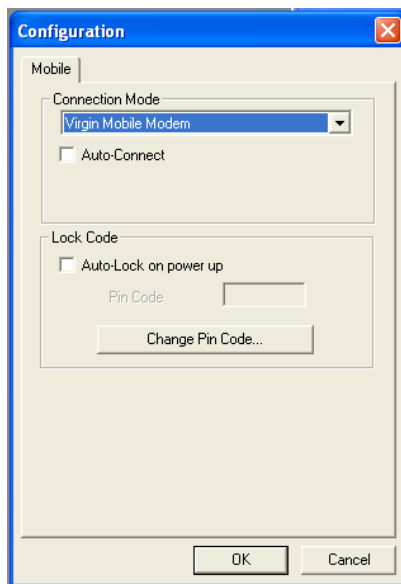
Reset counters monthly on day

Connection Log:

Time	Duration	Total MB
2/20/2009 1:46:07 PM	02:48:02	29.0

Configuration

The Configuration menu allows you to require a PIN code to access the modem. Use this setting to secure your mobile connections.



To require a PIN or Lock code:

1. Select **Configuration** from the Settings menu.
2. Click the **Mobile** tab.
3. Click **Change Pin Code**.
4. Enter your current PIN code and the new PIN code then click **Ok**.

NOTE:

The factory default lock code is the last four digits of your MDN#.

5. Select the **AutoLock on powerup** check box and then click **Ok**.

NOTE:

To disable the AutoLock, delete the PIN code from the Pin Code box and then deselect the **Autolock on power up** check box and click **Ok**.

Auto-Install

Checked by default, this option on the Settings menu indicates that Broadband2Go was set to install the drivers and the Broadband2Go software on your computer automatically.

Auto-Launch

Checked by default, this option on the Settings menu indicates that the Broadband2Go software is set to launch when your computer is started. Deselect the option if you prefer to launch the software manually.

Languages

The Broadband2Go software is available in several languages.

- Open the menu, select **Languages** then the language of your choice.

Program Modem

Use this option to enter the Account# / MDN and MSID that were provided to you on the Virgin Mobile Confirmation Page.

1. If the device is connected, click **Disconnect**.
2. Open the menu and select **Program Modem**.
3. Enter the Account# / MDN and MSID and click **OK**.

Tip:

The Account# / MDN and MSID are both 10 digit numbers, with no zeros at the beginning.

Device Properties

Device properties provides details for your device, such as the assigned ESN or Mobile Number.

- Open the menu and select **Device Properties**.



Radio Enable/Disable

This option allows you to disable (or enable) the wireless radio in your modem. This works like the wireless button on your laptop. The radio must be on in order for you to connect to the network.

- Open the menu and click **Enable Radio** or **Disable Radio**.



About

This option provides version details about the Broadband2Go software.

► Open the menu and select **About**.

Tip:

If you need this information for troubleshooting or customer support, use the **Copy Info** button to save the information to your clipboard so you can paste it into another document.



3

Troubleshooting

Troubleshooting
Uninstall and reinstall the software

Troubleshooting

MC760 Modem

The following tips will help solve many common problems encountered while using the MC760 Modem:

- Make sure you are using the MC760 Modem in the correct geographic region: a Broadband2Go MC760 Modem in the U.S.A.
- Ensure that the wireless network's coverage extends to your current location.
- When properly installed, the MC760 Modem is a highly reliable product.

Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by the MC760 Modem are being used by other devices.
- Network coverage is not available (either because you are outside the Broadband2Go and NationalAccess coverage area or because of an account or network problem).

My notebook does not reboot when the MC760 Modem is inserted. I experience an error or a blank screen.

- When this happens, simply remove the device and reboot the system.

The device contains internal memory which behaves like a CD-ROM. Some notebooks depending on the system BIOS settings, may try to reboot from the CD-ROM before the Hard Drive. The machine may present a black screen with a cursor or an error message about a non-bootable disk. This behavior is similar when using any non bootable CD in your CD-ROM drive.

Why do I see the message “No ‘device’ detected” when I run Broadband2Go?

Your modem was not inserted properly into your computer.

1. Exit Broadband2Go.
2. Remove your device.
3. Restart your computer.
4. Restart Broadband2Go.
5. Reinsert your device.

Why does the message “Searching for network” display continuously when I run Broadband2Go?

You may be outside of Virgin Mobile's coverage area. See www.virginmobileusa.com to view Virgin Mobile's latest coverage maps.

Why can't I connect to the network?

Check the user name, password and access point name (APN) (HSPA networks) or Connection Type (CDMA networks) in your connection profile. If any of these entries are wrong, you won't be able to connect to the network.

Why can't I browse the web?

Check your server settings. The following steps are for Internet Explorer. Other browsers will have similar functions.

1. Start Internet Explorer.
2. Click on the **Tools** menu, and select **Internet Options**.
3. Click the **Connections** tab
4. Under **Dial-up and Virtual Private Network settings**, double-click the name of your connection (for example, **3G Connection**).
This field name will vary, depending on your network type.
5. Check your **Username** and **Password**:
6. If you are using a proxy server, select the appropriate boxes.
7. Click **OK** twice to finish.

Uninstall and reinstall the software

Should you need to uninstall and / or reinstall your software follow these instructions.

To uninstall the software:

1. Go to **Start** on your computer.
2. Select **Control Panel**.
3. Click **Add or Remove Programs**.
4. A new window will appear, select 'Broadband2Go' and click **Change/Remove**.
5. Follow the on-screen instructions.

After completing steps 1–5, the name Broadband2Go will no longer appear in your program list and the icon will disappear from your desktop.

To reinstall the software:

- ▶ Simply re-insert the modem into a USB port.

– OR –

- ▶ If you have acquired updated software, follow the instructions that came with it.

4

Reference

Safety and Liability
Product Specifications
Regulatory
Glossary
Limited Warranty and Liability

Safety and Liability

Wireless communications

IMPORTANT Notice

Due to the transmission and reception properties of wireless communications, data can occasionally be lost or delayed. This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the modem may adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

Virgin Mobile USA or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the MC760 Modem, or failure of the MC760 Modem to transmit or receive such data.

Safety hazards

Do not operate the MC760 Modem in an environment that may be susceptible to radio interference resulting in danger specifically;

Areas where prohibited by the law

- Follow any special rules and regulations and obey all signs and notices. Always turn off the host device and remove the modem from the USB port when instructed to do so, or when you suspect that it may cause interference or danger.

Where explosive atmospheres may be present

- Do not operate your modem in any area where a potentially explosive atmosphere may exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.
- Users are advised not to operate the modem while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.
- Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Near Medical and life support equipment

- Do not operate your modem in any area where medical equipment, life support equipment, or near any equipment that may be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The modem may transmit signals that could interfere with this equipment.

On an aircraft, either on the ground or airborne

- In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the host device is turned off and your modem is removed from the USB port prior to boarding aircraft in order to comply with these regulations. The modem can transmit signals that could interfere with various onboard systems and controls.

While operating a vehicle

- The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offense.

Limitation of liability

The information contained in this document is subject to change without notice and should not be construed as a commitment by Virgin Mobile USA Inc.

Product Specifications

System Requirements

To install and use your device, your host computer must meet these requirements:

Operating System	Windows ® Vista and XP (SP2 or higher)
Software	Internet browser software (for example, Internet Explorer, Netscape, Safari, Firefox, AOL)
Modem Software	Broadband2Go included on the device, no CD required.
Interface	One Type-A USB port

Technical Specifications

Name:	Virgin Mobile USA MC760 Modem
Model:	MC760 Modem
Approvals:	FCC (North America);CDG,
Weight	19 g / 0.67 oz
Dimensions:	57 mm x 25 mm x 12 mm (2.24 in x 0.98 in x 0.47 in)
Wireless Network – Dual Mode:	CDMA 1X/EV-DO
Chip Set	QUALCOMM™ QSC6085
Interface Type:	Type A USB Port
Technology:	CDMA Rev A, Rev 0, 1XRTT
Band Designation:	800/1900 MHz
Transmit Band:	824.7-848.31MHz / 1851.25-1908.75MHz
Receive Band:	869.7-893.31MHz / 1931.25-1988.75MHz

Operating Temperature	0° C to +45° C (32°F to 131° F)
Storage Temperature	-20° C to +65° C (-4° F to 149° F)
Relative Humidity	5% to 90% over operating temperature
Drop	1 meter drop, no damage – fully operational
Vibration Stability	5 Hz to 500 Hz, 0.1 octave/second

Regulatory

Federal Communications Commission Notice (FCC -- United States)

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable limits for a Class B digital device, pursuant to part 15 of the FCC Rules and Industry Canada ICES-003. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna

Increase the separation between the equipment and the receiver

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/television technician for help

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE MC760 MODEM IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT VIRGIN MOBILE USA TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

FCC CAUTION: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

MODIFICATIONS: The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Virgin Mobile USA, Inc. may void your authority to operate the equipment.

This USB modem is approved for use in normal size notebook computers only (typically with 12" or larger display screens). To comply with FCC RF exposure requirements, this modem should not be used in configurations that cannot maintain at least 11 mm (approximately 0.43" or 7/16") from users and bystanders; for example, in certain notebook and tablet computers and configurations where the USB connectors are unable to provide or ensure the necessary separation is available between the modem and its users to satisfy RF exposure compliance requirements.

RF Exposure/Specific Absorption Rate (SAR) Information

This product has been evaluated for SAR and meets the FCC Guidelines for exposure to radio waves.

FCC Equipment Authorization ID: PKRNVWMC760

Your wireless modem is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless devices including mobile USB Modems and wireless modems uses a unit of measurement known as the Specific Absorption Rate, or SAR. Tests for SAR are conducted using standard operating positions reviewed by the FCC with the device under test transmitting at its highest certified power level in all frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the USB Modem or modem while operating can be well below the maximum value. This is because the USB Modem is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before this device is made available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (for example, at the ear or worn on the body) as required by the FCC for each model.

THE FCC HAS GRANTED AN EQUIPMENT AUTHORIZATION FOR THIS WIRELESS MODEM WITH ALL REPORTED SAR LEVELS EVALUATED AS IN COMPLIANCE WITH THE FCC RF EXPOSURE GUIDELINES. THE HIGHEST SAR VALUE FOR THIS MODEM WHEN TESTED FOR COMPLIANCE AGAINST FCC STANDARDS WAS 1.54 W/KG USER-LAP POSITION.

Glossary

1xRTT

Short for single carrier (1x) Radio Transmission Technology. A high speed wireless technology based on the CDMA platform. 1xRTT has the capability of providing broadband-like speeds of up to 144 Kbps. 1xRTT is also referred to as CDMA2000.

1xEVDO

Part of a family of CDMA2000 1x digital wireless standards. 1xEVDO is a “3G” standard. EVDO stands for “EVolution, Data-Optimized.” 1xEVDO is based on a technology initially known as “HDR” (High Data Rate) or “HRPD” (High Rate Packet Data), developed by Qualcomm. The international standard is known as IS-856. 1xEVDO has the capability of providing broadband-like speeds of average speeds of 400-700 kbps.

bps

Bits per second – rate of data flow.

Broadband

High-capacity high-speed, transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.

Firewall

A hardware or software boundary that protects a network or single computer from unwanted outside traffic.

HSDPA

High Speed Downlink Packet Access. HSDPA is an enhanced version of WCDMA that supports broadband connections with download speeds up to 7.2 Mbps. This enhanced 3G technology enables the download of high-bandwidth multimedia files, high resolution graphics, and other complex files, and viewing email attachments at broadband-like speeds.

Hot-Swappable

The ability to remove and replace the microSDHC Card from a device while it is still connected to the computer and online without damaging the device.

IP

Internet Protocol. The mechanism by which packets are routed between computers on a network.

ISP

Internet Service Provider. Also referred to as the service carrier, an ISP provides Internet connection service.

Kbps

Kilobits per second – rate of data flow

LAN

Local Area Network. A data network confined to limited area with moderate to high data rates. Does not use common carrier circuits, although may have gateways or bridges to other public or private networks.

Mbps

Megabits per second

MicroSDHC

Additional external memory for devices with that capability.

MicroSDHC Card

A small, removable flash memory card available in various storage sizes. This accessory is sold separately.

MicroSDHC Slot

A built-in slot on some devices that is designed specifically for a microSDHC Card.

PDA

Personal Digital Assistant. A handheld device used for organization, notes, address books, etc.

PPP

Point to Point Protocol. A method of connecting a computer to the Internet.

Proxy

A firewall mechanism that replaces the IP address of a host on the internal (protected) network with its own IP address for all traffic passing through it.

Rev A

CDMA EV-DO Rev. A is a leading-edge wireless technology with higher data rates and higher system capacity. It is a fully backward compatible standard and remains interoperable with deployed EV-DO networks and devices around the world. The increased data rates on Rev. A's physical layer enable richer applications and services. For more information, visit www.cdg.org.

TCP/IP

Transmission Control Protocol/Internet Protocol. A protocol for communicating over the Internet.

Type A USB

The USB ports on computers and hubs have a rectangular Type A socket, and peripheral devices have a cable with a Type A plug. Peripherals that do not have an attached cable have a square Type B socket on the device and a separate cable with a Type A and Type B plug.

USB

Universal Serial Bus. A connection type originally for computer peripherals such as printers, keyboards, modems and now many more things. The connection standard has expanded beyond computer peripherals to include mobile phones, MP3 players, and other devices.

VPN

Virtual Private Network. A way to communicate through a dedicated server securely to a corporate network over the Internet.

WAN / WWAN

Wide Area Network (WAN). A computer network covering a broad geographical area. WANs are used to connect local area networks (LANs) together, so that users and computers in one location can communicate with users and computers in other locations.

WWAN

Wireless Wide Area Network (WWAN). Also called “wireless broadband” or “broadband wireless,” wireless WANs (WWANs) use cellular towers to transmit a wireless signal over a range of several miles to a mobile device. Compare to wireless Wi-Fi LANs (WLANs), which span only a few hundred feet and generally only to stationary devices.

Limited Warranty and Liability

Novatel Wireless, Inc. warrants for the 12 month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at Novatel Wireless' option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to Novatel Wireless' specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformity's in the Product due to modifications, alterations, additions or changes not made in accordance with Novatel Wireless' specifications or authorized by Novatel Wireless, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from Novatel Wireless, (VII) products designated by Novatel Wireless as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.